

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

T2146-907321

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

09/868332

INTERNATIONAL APPLICATION NO.
PCT/FR00/02895

INTERNATIONAL FILING DATE
October 18, 2000

PRIORITY DATE CLAIMED
October 18, 1999

TITLE OF INVENTION

**MESSAGE TRANSMISSION SYSTEM AND METHOD, AND UTILIZATION OF THE TRANSMISSION SYSTEM
TO INVESTIGATE SERVICES OFFERED**

APPLICANT(S) FOR DO/EO/US

Jean-Claude FOURNIER and Stephane ROSE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. is attached hereto (required only if not communicated by the International Bureau).
 - b. has been communicated by the International Bureau.
 - c. is not required, as the application was filed in the United States Receiving Office (RO/US).
6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. is attached hereto.
 - b. has been previously submitted under 35 U.S.C. 154(d)(4).
7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. are attached hereto (required only if not communicated by the International Bureau).
 - b. have been communicated by the International Bureau.
 - c. have not been made; however, the time limit for making such amendments has NOT expired.
 - d. have not been made and will not be made.
8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. A copy of the International Search Report (PCT/ISA/210).

Items 13 to 20 below concern document(s) or information included:

13. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. A **FIRST** preliminary amendment.
16. A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. A substitute specification.
18. A change of power of attorney and/or address letter.
19. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
20. A second copy of the published international application under 35 U.S.C. 154(d)(4).
21. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
22. Certificate of Mailing by Express Mail
23. Other items or information:

Verification of Translator

Formal Drawings (4)

Proposed Drawing Corrections, with 4 red-lined formal drawings

PCT forms: Demande, PCT/IB/301, 308; PCT/RO/101

| | | |
|--|--|---|
| U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.53) 09/868332 | INTERNATIONAL APPLICATION NO. PCT/FR00/02895 | ATTORNEY'S DOCKET NUMBER T2146-907321 |
|--|--|---|

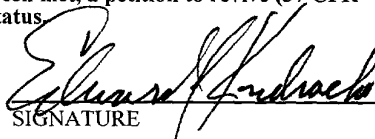
| | | | | | |
|--|--------------|--------------|-----------|----------------------------------|----|
| 24. The following fees are submitted: | | | | CALCULATIONS PTO USE ONLY | |
| BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) : | | | | | |
| <input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO | | | | \$1000.00 | |
| <input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO | | | | \$860.00 | |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO | | | | \$710.00 | |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) | | | | \$690.00 | |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) | | | | \$100.00 | |
| ENTER APPROPRIATE BASIC FEE AMOUNT = | | | | \$860.00 | |
| Surcharge of \$130.00 for furnishing the oath or declaration later than _____ months from the earliest claimed priority date (37 CFR 1.492 (e)). <input type="checkbox"/> 20 <input type="checkbox"/> 30 | | | | \$0.00 | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | |
| Total claims | 24 - 20 = | 4 | x \$18.00 | \$72.00 | |
| Independent claims | 3 - 3 = | 0 | x \$80.00 | \$0.00 | |
| Multiple Dependent Claims (check if applicable). <input type="checkbox"/> | | | | \$0.00 | |
| TOTAL OF ABOVE CALCULATIONS = | | | | \$932.00 | |
| Applicant claims small entity status. (See 37 CFR 1.27). The fees indicated above are reduced by 1/2. | | | | \$0.00 | |
| SUBTOTAL = | | | | \$932.00 | |
| Processing fee of \$130.00 for furnishing the English translation later than _____ months from the earliest claimed priority date (37 CFR 1.492 (f)). <input type="checkbox"/> 20 <input type="checkbox"/> 30 | | | | \$0.00 | |
| TOTAL NATIONAL FEE = | | | | \$932.00 | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). <input checked="" type="checkbox"/> | | | | \$40.00 | |
| TOTAL FEES ENCLOSED = | | | | \$972.00 | |
| | | | | Amount to be: | \$ |
| | | | | refunded | \$ |
| | | | | charged | \$ |

- a. A check in the amount of \$972.00 to cover the above fees is enclosed.
- b. Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1165 . A duplicate copy of this sheet is enclosed.
- d. Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Edward J. Kondracki
MILES & STOCKBRIDGE P.C.
Suite 500 - 1751 Pinnacle Drive
McLean, VA 22102-3833


SIGNATURE

Edward J. Kondracki
NAME

 20,604
REGISTRATION NUMBER

June 18, 2001
DATE

T2146-907321-US3853/BC

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (D.O./E.O./US)

Applicant: Jean-Claude FOURNIER and Stephane ROSE

International
Application No.: PCT/FR00/02895

International
Filing Date: 18 October 2000

U.S. Serial No.: To be Assigned

U.S. Filing Date: June 18, 2001

For: **MESSAGE TRANSMISSION SYSTEM AND METHOD,
AND UTILIZATION OF THE TRANSMISSION SYSTEM
TO INVESTIGATE SERVICES OFFERED**

McLean, Virginia

PROPOSED DRAWING CORRECTIONS

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Applicant requests approval of the drawing corrections on Figs. 1 – 5 as
shown in red on the attached four (4) sheets.

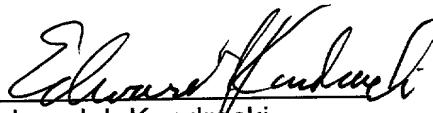
T2146-907321-US3853/BC

The proposed corrections only comprise translating the French terms into English and removing the headings "1/4" – "4/4" to conform the drawings to U.S. practice.

Respectfully submitted,

MILES & STOCKBRIDGE P.C.

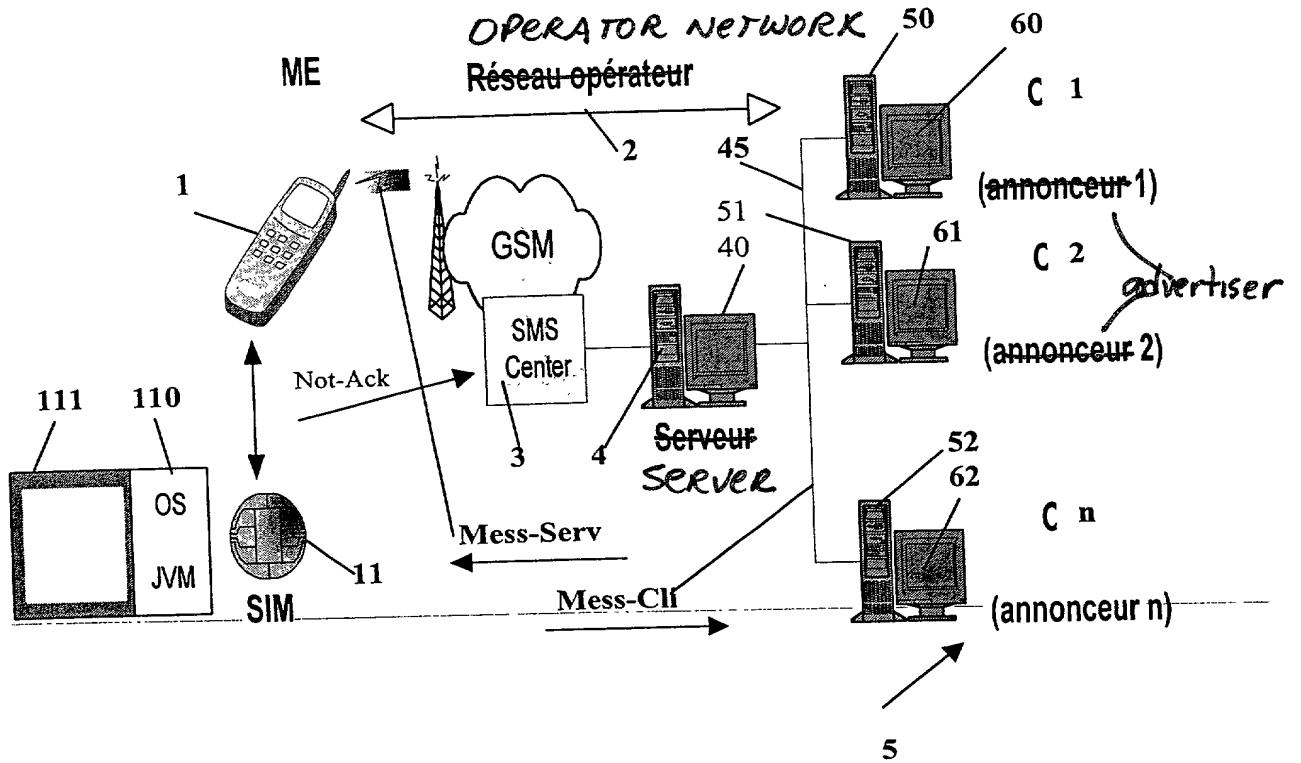
Date: June 18, 2001

By: 
Edward J. Kondracki
Registration No. 20,604

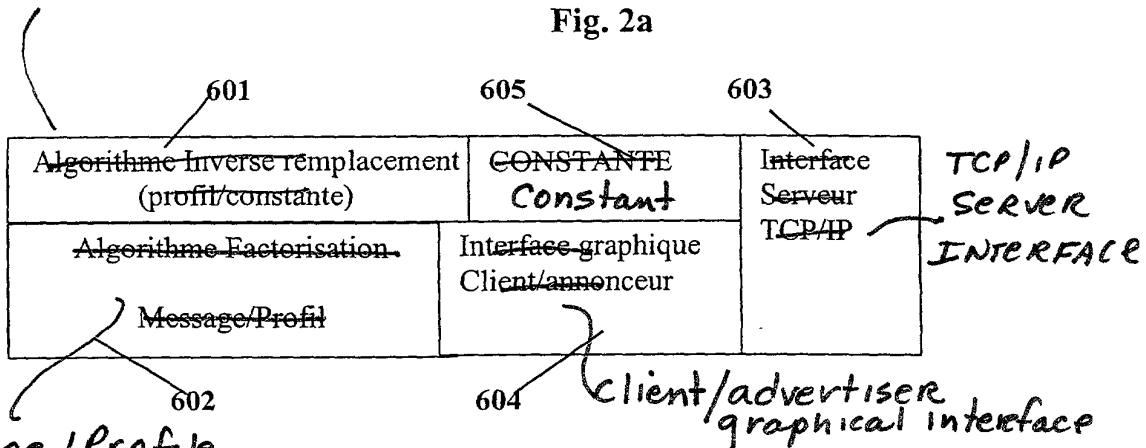
1751 Pinnacle Drive – Suite 500
McLean, VA 22102-3833
Tel.: 703/903-9000
Fax: 703/610-8686

09 / 868332

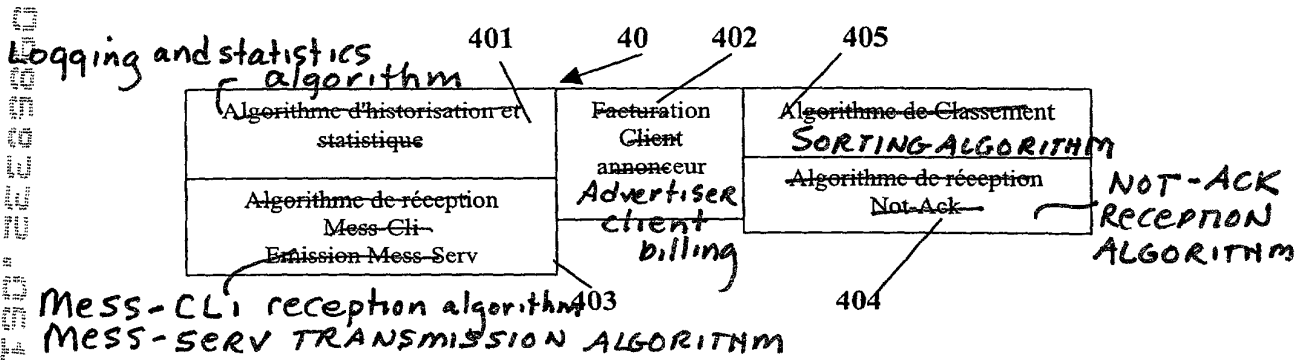
Fig. 1



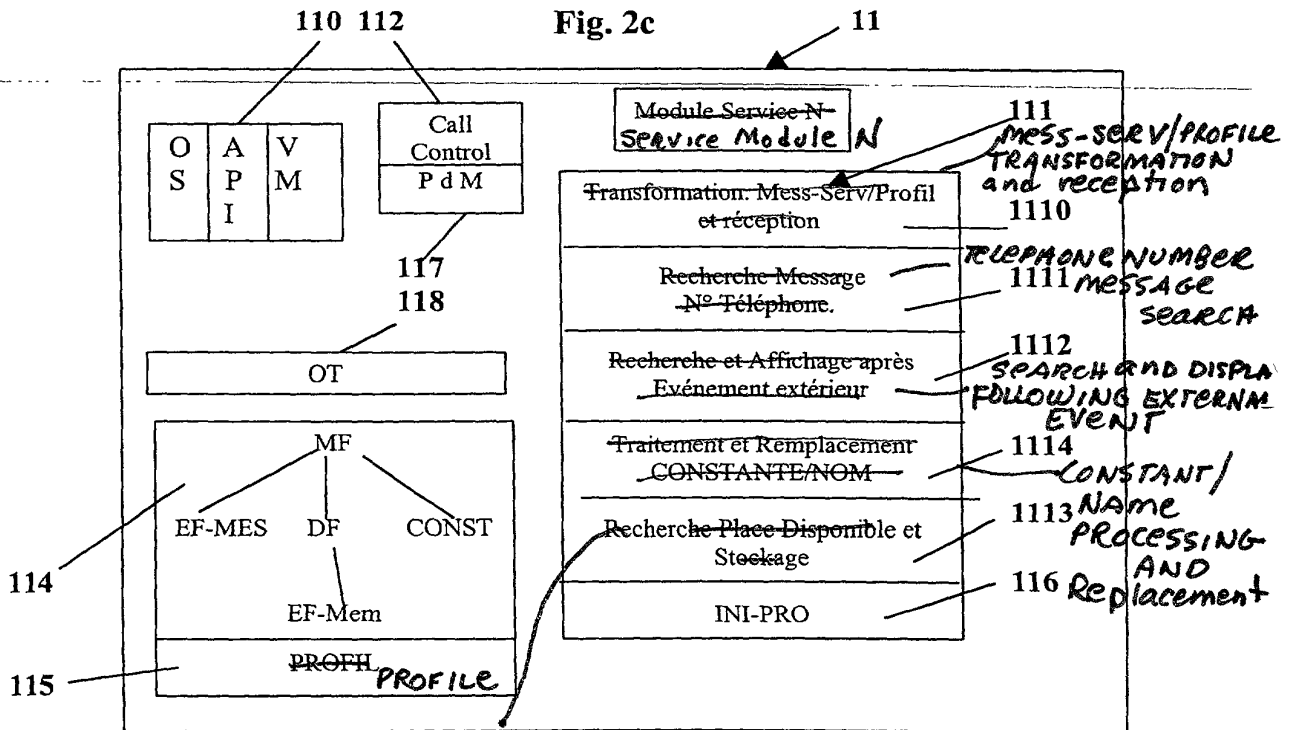
INVERSE Replacement
ALGORITHM (profil/constant) **Pl 2/4**



Message/Profile
FACTORING ALGORITHM



Mess-CLI reception algorithm
MESS-SERV TRANSMISSION ALGORITHM



SEARCH FOR AVAILABLE SPACE * STORAGE

P13/4

Fig. 3a

Header of the File "PROFILE" 115

| EN-TETE DU FICHIER « PROFIL » | | |
|--|---------------|------------------------|
| T = « Nom » | L = 20 octets | « Stéphane ROSE » |
| T = « AGE » | L = 2 octets | « 1960 » |
| T = « SEXE SEX | L = 1 octet | « M » |
| T = « ABONNEMENT SUBSCRIPTION | L = 1 octet | « 2 - 4 » heures hours |

byte(s)

Mess-Cli

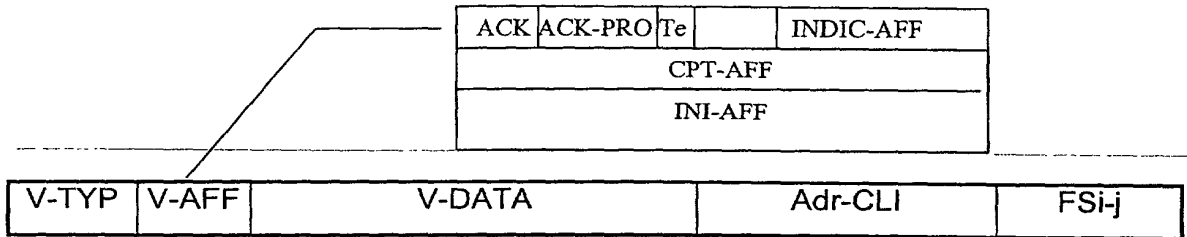


Fig. 3b

| | | |
|-----------|----------|----------------------------|
| AGE | SEXE Sex | ABONNEMENT SUBSCRIPTION |
| 1950-1980 | M | 1,3 ; 4 heures hours |

Mess-Serv



Fig. 3c

~~PI 4/4~~

Fig. 4

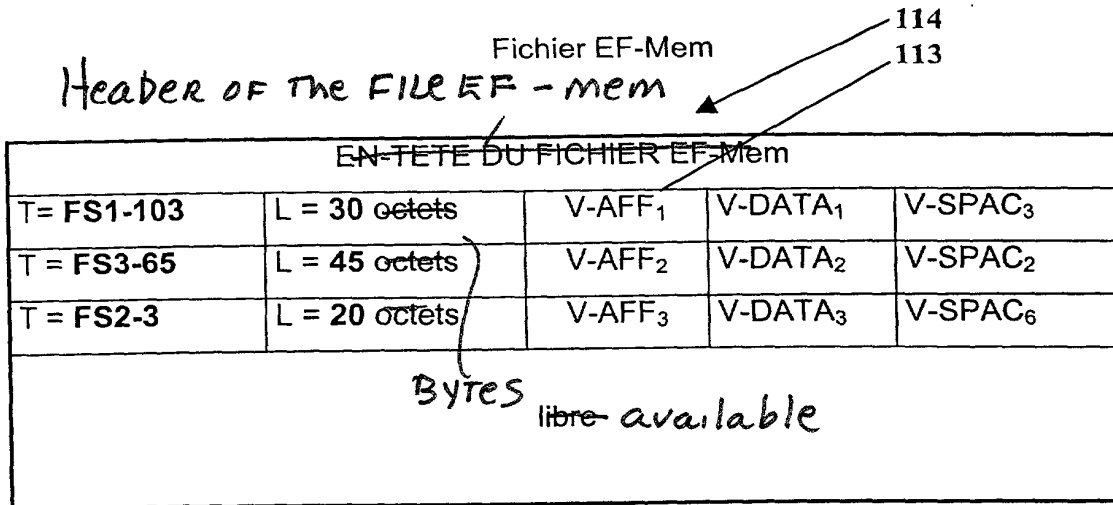


Fig. 5

Not-Ack

| | | | |
|----------|----------|-------|---------------------|
| Tn ou Ta | n octets | FSi-j | (données de profil) |
| OR | bytes | | profile data |

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (D.O./E.O./US)

Applicant: Jean-Claude FOURNIER and Stephane ROSE

International Application No.: PCT/FR00/02895

International Filing Date: 18 October 2000

U.S. Serial No.: To be Assigned

U.S. Filing Date: June 18, 2001

For: **MESSAGE TRANSMISSION SYSTEM AND METHOD, AND UTILIZATION OF THE TRANSMISSION SYSTEM TO INVESTIGATE SERVICES OFFERED**
McLean, Virginia

PRELIMINARY AMENDMENT

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

Please amend the subject application, filed concurrently herewith, as indicated below:

IN THE TITLE:

Please cancel the title in its entirety and substitute the following new title:

--MESSAGE TRANSMISSION SYSTEM AND METHOD, AND UTILIZATION OF THE TRANSMISSION SYSTEM TO INVESTIGATE SERVICES OFFERED--

IN THE SPECIFICATION:

After the title and before the first paragraph on page 1 at line 5, insert the following heading at the left-hand margin:

09/868332

--FIELD OF THE INVENTION--;

Page 1, after line 7, insert the following new paragraph:

--More particularly, the invention involves the display of advertising messages on the screens of wireless telephones. The user of the telephone then chooses whether or not to request further information on the services advertised, or "offered." No services are "provided" via the message transmission system.--

Page 1, line 8, before the paragraph beginning "The GSM system...", insert the following heading at the left-hand margin:

--DESCRIPTION OF RELATED ART--;

Page 2, at line 25, and before the paragraph beginning "The object of the ..." insert the following paragraph at the left-hand margin:

--SUMMARY OF THE INVENTION--;

Page 3, delete the paragraph beginning at line 11 and ending at line 13 in its entirety and insert the following new paragraph. (A paragraph showing the changes using underlining and bracketing is included as an attachment at the end of this Preliminary Amendment).

--According to another characteristic, the processing means are constituted by a service module, which is automatically configured during its activation based on selection conditions contained in the third field.--

Page 5, at line 25 and before the paragraph beginning "Other characteristics...", insert the following heading at the left hand margin:

--BRIEF DESCRIPTION OF THE DRAWINGS--;

Page 6, at line 17 and before the paragraph beginning "The system of

the...”, insert the following heading at the left hand margin:

--DESCRIPTION OF THE PREFERRED EMBODIMENTS--;

Page 9, delete the paragraph beginning at line 14 and ending at line 29 in its entirety and insert the following new paragraph. (A paragraph showing the changes using underlining and bracketing is included as an attachment at the end of this Preliminary Amendment).

--The SIM card belongs to the operator, which then transmits the message to a subscriber. The subscriber is listed by a unique number contained in his card, so the subscriber is completely authenticated by it. The wireless telephone is an object that can only be used by a subscriber on the condition that it contains a SIM card. The SIM card is widely specified by the standard known as ETSI – GSM 11.11. The SIM card has an operating system capable of processing the information received by the wireless telephone and contained in a programmable nonvolatile memory. This memory contains data files configured for the GSM application. The operating system includes one part written into the ROM and another part written into the programmable memory. The primitives are stored in dedicated fashion in the programmable memory, thus making it possible to add new functions or to modify the existing primitives, but it is also possible to write them into the ROM. Advantageously, the primitives are written in high-level language, and interpreted during their execution by a virtual machine. In the remainder of the document, the operating system is considered to be the executable program stored in the ROM and/or downloaded into the programmable memory, and the primitives are considered to constitute the

program that implements the invention in the card.--

Page 19, after line 16, insert the following new paragraph:

--While this invention has been described in conjunction with specific embodiments thereof, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, the preferred embodiments of the invention as set forth herein, are intended to be illustrative, not limiting. Various changes may be made without departing from the true spirit and full scope of the invention as set forth herein and defined in the claims.—

IN THE CLAIMS:

Please amend claims 1 – 22 and add new claims 23 and 24. The claims that follow are a complete set of “clean” claims. The original claims marked up to show the changes with underlining and bracketing are included as an attachment to this Preliminary Amendment:

1 1. (Amended) A message transmission system including a
2 telecommunication network (2) comprising a communication server (4) and at
3 least one wireless telephone (1), the server comprising means for sending
4 messages to said at least one wireless telephone, the wireless telephone (1)
5 being equipped with means for storing and means for processing messages
6 (Mess-Serv), each message (Mess-Serv) comprising a first field (V-TYP)
7 containing information relating to the type profile of the recipient of the message,
8 and the processing means including means for comparing the profile stored in
9 each wireless telephone relative to the subscriber using the wireless telephone
10 with the profile contained in the message and authorizing the storage of the
11 message in the storage means if the profile of the subscriber using the wireless
12 telephone is compatible with the type profile contained in the first field of the
13 message.

1 2. (Amended) A message transmission system according to claim 1,
2 wherein the processing means store information on the utilization of the
3 messages, and the message comprises a second field containing a reference
4 address of the server, for sending said information to said server.

1 3. (Amended) A message transmission system according to claim 1,
2 wherein the processing means comprise a service module (111) automatically
3 configured during activation based on selection conditions contained in a third

4 field (V-AFF).

1 4. (Amended) A message transmission system according to claim 3,
2 wherein the service module is in a high-level language interpreted by a virtual
3 machine of a SIM card.

1 5. (Amended) A message transmission system according to claim 3,
2 wherein the service module includes means for sending an acknowledgement of
3 receipt of the message stored based on selection data (ACK) contained in the
4 third field (V-AFF).

1 6. (Amended) A message transmission system according to claim 3,
2 wherein the processing means include means for sending an acknowledgement
3 of receipt accompanied by the profile of the wireless telephone user based on
4 selection data (ACK-PRO) contained in the third field (V-AFF) of the message.

1 7. (Amended) A message transmission system according to claim 5,
2 wherein the service module comprises means for activating the display of each
3 message based on selection data (INDIC-AFF, CPT-AFF, INI-AFF) contained in
4 the third field (V-AFF) of the message.

1 8. (Amended) A message transmission system according to claim 7,
2 wherein the selection data includes a counter of a number of displays (CPT-

3 AFF).

1 9. (Amended) A message transmission system according to claim 7,
2 wherein the selection data includes a second counter of a number of display
3 initializations (INI-AFF).

1 10. (Amended) A message transmission system according to claim 6,
2 wherein the selection data includes an indicator (INDIC-AFF) of the display mode
3 chosen from several possible modes.

1 11. (Amended) A message transmission system according to claim 10,
2 wherein the display modes are parameterizable and multiple and correspond to
3 at least:

- 4 a) the mode for displaying the message every N times the wireless
5 telephone is turned on;
- 6 b) the mode for displaying the message every N times a call is made by
7 the subscriber;
- 8 c) the mode for displaying the message every N times a call is made to a
9 particular number;
- 10 d) the mode for displaying the message every day starting at a given time;
- 11 e) the mode for displaying the message every time a call ends;
- 12 f) the mode for displaying the message when chosen by the user while
13 running through the menu.

1 12. (Amended) A message transmission system according to claim 3,
2 wherein the service module comprises an algorithm (1110) for transforming the
3 message based on a utilization profile stored in the SIM card (11).

1 13. (Amended) A message transmission system according to claim 3,
2 wherein the service module comprises an algorithm (1114) for processing
3 constants and replacing them with names and vice versa.

1 14. (Amended) A message transmission system according to claim 3,
2 wherein the service module comprises an algorithm (1112) for searching for a
3 display following an external event.

1 15. (Amended) A message transmission system according to claim 3,
2 wherein the service module includes means for searching for available space for
3 storing new messages and erasing the messages displayed the number of times
4 provided for (1113).

1 16. (Amended) A message transmission system according to claim 3,
2 wherein the service module includes means for sending notifications, the
3 notifications containing the number of displays, the profile of each user, and data
4 identifying the advertising client.

1 17. (Amended) A method for transmitting messages in a

2 telecommunication network comprising a communication server and at least one
3 wireless telephone, said server comprising means for sending messages to said
4 at least one wireless telephones, the wireless telephone being equipped with
5 means for storing and processing messages, characterized in that said method
6 comprises:

7 - a step for sending a message (Mess-Serv) comprising a first field (V-
8 TYP) containing information relative to the type profile of a recipient of the
9 message, and

10 - a step for processing the message received by the recipient and for
11 comparing the profile contained in said message (Mess-Serv) with a user's
12 subscriber profile stored in the memory of the wireless telephone, and

13 - a step for storing the message in the storage means of the wireless
14 telephone if the user's subscriber profile is compatible with the type profile
15 contained in the message.

1 18. (Amended) A method according to claim 17, wherein the wireless
2 telephone comprise display means, the method including a step for displaying
3 messages upon occurrence of events specified in a field of the message.

1 19. (Amended) A method according to claim 17, further including a
2 step for sending an acknowledgement of receipt of the message.

1 20. (Amended) A method according to claim 17, further including a

2 step for sending an acknowledgement of receipt of the message, the
3 acknowledgement of receipt being accompanied by the profile of the user that
4 received the message.

1 21. (Amended) A method according to claim 17, further including a
2 step for sending a notification from the wireless telephone to the server,
3 containing a number of times a given message has been displayed, the profile of
4 the wireless telephone that displayed it, and data identifying the number of the
5 message displayed and sent by an advertising client, as well as data identifying
6 the advertising client.

1 22. (Amended) A method according to claim 17 further including the
2 step of logging and extracting statistics from notifications or acknowledgements
3 of reception received from the wireless telephone using an algorithm in the
4 server.

1 --23. (new claim) A method for utilizing services offered by a service
2 provider via a message transmission system comprising a telecommunication
3 network including a communication server (4) and at least one wireless
4 telephone (1) comprising sending a message to said at least one wireless
5 telephone, storing the message in the wireless telephone, processing the
6 message in the wireless telephone, each message (Mess-Serv) comprising a
7 first field (U-TYP) containing information relating to the type profile of the

8 recipient of the message, comparing the profile stored in the wireless telephone
9 relative to the subscriber using the wireless telephone with the profile contained
10 in the message and authorizing the storage of the message in a memory in the
11 wireless telephone if the profile of the subscriber using the wireless telephone is
12 compatible with the type profile contained in the first field of the message.

1 24. (new claim) A method according to claim 23 further including logging
2 and extracting statistics from notifications or acknowledgements of reception
3 received from the wireless telephone using an algorithm in the server.--

11/15/2011 10:00:00 AM

IN THE ABSTRACT:

Please delete the Abstract at page 24 in its entirety and substitute the following new Abstract. (An Abstract showing the changes using brackets and underlining is included as an attachment at the end of this Preliminary Amendment.)

11/11/2014 10:00 AM

--ABSTRACT

The present invention relates to a message transmission system comprising a telecommunication network (2) comprising a communication server (4) and at least one wireless telephone (1), the server comprising means for sending messages to one or more wireless telephones, the wireless telephone or telephones (1) being equipped with means for storing and processing message (Mess-Serv), characterized in that the messages (Mess-Serv) comprise a first field (V-TYP) containing information relating to the type profile of the recipient of the message and in that the processing means compare the profile stored in each wireless telephone relative to the subscriber using the wireless telephone to the profile contained in the message, and authorize the storage of the messages in the storage means if the profile of the subscriber using the wireless telephone is compatible with the type profile contained in the field of the message.--

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REMARKS

This Preliminary Amendment is filed to insert headings to conform the application to U.S. practice, to eliminate the use of multiple dependent claims, and to correct informalities in the specification, claims and abstract resulting from a literal translation of the French text.

Early action on the merits is earnestly solicited.

Respectfully submitted,

MILES & STOCKBRIDGE P.C.

Date: June 18, 2001

By: 

Edward J. Kondracki
Registration No. 20,604

1751 Pinnacle Drive – Suite 500
McLean, VA 22102-3833
Tel.: 703/903-9000
Fax: 703/610-8686

**Paragraph at page 9, beginning at line 14 and ending at line 29,
showing the changes using underlining and bracketing:**

--The SIM card belongs to the operator, which then transmits [it] the message to a subscriber. The subscriber is listed by a unique number contained in his card, so the subscriber is completely authenticated by it. The wireless telephone is an object that can only be used by a subscriber on the condition that it contains a SIM card. The SIM card is widely specified by the standard known as ETSI – GSM 11.11. The SIM card has an operating system capable of processing the information received by the wireless telephone and contained in a programmable nonvolatile memory. This memory contains data files configured for the GSM application. The operating system includes one part written into the ROM and another part written into the programmable memory. The primitives are stored in dedicated fashion in the programmable memory, thus making it possible to add new functions or to modify the existing primitives, but it is also possible to write them into the ROM. Advantageously, the primitives are written in high-level language, and interpreted during their execution by a virtual machine. In the remainder of the document, the operating system is considered to be the executable program stored in the ROM and/or downloaded into the programmable memory, and the primitives are considered to constitute the program that implements the invention in the card.--

The following are the original claims marked up to show the changes with underlining and bracketing:

1 1. (Amended) [Message] A message transmission system
 2 [comprising] including a telecommunication network (2) comprising a
 3 communication server (4) and at least one wireless telephone (1), the server
 4 comprising means for sending messages to said at least one [or more] wireless
 5 telephone[s], the wireless telephone [or telephones] (1) being equipped with
 6 means for storing and means for processing messages (Mess-Serv),
 7 [characterized in that] each message (Mess-Serv) [comprises] comprising a first
 8 field (V-TYP) containing information relating to the type profile of the recipient of
 9 the message, and [in that] the processing means [compare] including means for
 10 comparing the profile stored in each wireless telephone relative to the subscriber
 11 using the wireless telephone with the profile contained in the message and
 12 [authorize] authorizing the storage of the message in the storage means if the
 13 profile of the subscriber using the wireless telephone is compatible with the type
 14 profile contained in the first field of the message.

1 2. (Amended) [Message] A message transmission system according
 2 to claim 1, [characterized in that the message comprises a field containing a
 3 reference address of the server and in that] wherein the processing means store
 4 information on the utilization of the messages, and the message comprises a
 5 second field containing a reference address of the server, for sending said

6 information [being sent] to said server.

1 3. (Amended) [System] A message transmission system according to
2 claim 1, [characterized in that] wherein the processing means comprise a service
3 module (111) [that is] automatically configured during [its] activation based on
4 selection conditions contained in a [second] third field (V-AFF).

1 4. (Amended) [Message] A message transmission system according
2 to claim 3, [characterized in that] wherein the service module is in a high-level
3 language interpreted by [the] a virtual machine of a SIM card.

1 5. (Amended) [Message] A message transmission system according
2 to claim 3, [characterized in that] wherein the service module includes means for
3 sending an acknowledgement of receipt of the message stored based on
4 selection data (ACK) contained in [a] the third field (V-AFF).

1 6. (Amended) [System]] A message transmission system according
2 to claim 3, [characterized in that] wherein the processing means include means
3 for sending an acknowledgement of receipt accompanied by the profile of the
4 wireless telephone user based on selection data (ACK-PRO) contained in [a] the
5 third field (V-AFF) of the message.

1 7. (Amended) [System] A message transmission system according to

2 claim 5, [characterized in that] wherein the service module comprises means for
3 activating the display of each message based on selection data (INDIC-AFF,
4 CPT-AFF, INI-AFF) contained in the third field (V-AFF) of the message.

1 8. (Amended) [System] A message transmission system according to
2 claim 7, [characterized in that] wherein the selection data includes a counter of a
3 number of displays (CPT-AFF).

1 9. (Amended) [System] A message transmission system according to
2 claim 7, [characterized in that] wherein the selection data includes a second
3 counter of a number of display initializations (INI-AFF).

1 10. (Amended) [System] A message transmission system according to
2 claim 6, [characterized in that] wherein the selection data includes an indicator
3 (INDIC-AFF) of the display mode chosen from several possible modes.

1 11. (Amended) [System] A message transmission system according to
2 claim 10, [characterized in that] wherein the display modes are parameterizable
3 and multiple and correspond to at least:

4 a) the mode for displaying the message every N times the wireless
5 telephone is turned on;

6 b) the mode for displaying the message every N times a call is made by
7 the subscriber;

- 8 c) the mode for displaying the message every N times a call is made to a
- 9 particular number;
- 10 d) the mode for displaying the message every day starting at a given time;
- 11 e) the mode for displaying the message every time a call ends;
- 12 f) the mode for displaying the message when chosen by the user while
- 13 running through the menu.

1 12. (Amended) [System] A message transmission system according to
2 claim 3, [characterized in that] wherein the service module comprises an
3 algorithm (1110) for transforming the message based on a utilization profile
4 stored in the SIM card (11).

1 13. (Amended) [System] A message transmission system according to
2 claim 3, [characterized in that] wherein the service module comprises an
3 algorithm (1114) for processing constants and replacing them with names and
4 vice versa.

1 14. (Amended) [System] A message transmission system according to
2 claim 3, [characterized in that] wherein the service module comprises an
3 algorithm (1112) for searching for a display following an external event.

1 15. (Amended) [System] A message transmission system according to
2 claim 3, [characterized in that] wherein the service module includes means for

3 searching for available space for storing new messages and erasing the
4 messages displayed the number of times provided for (1113).

1 16. (Amended) [System] A message transmission system according to
2 claim 3, [characterized in that] wherein the service module includes means for
3 sending notifications, the notifications containing the number of displays, the
4 profile of each user, and data identifying the advertising client.

1 17. (Amended) [Method] A method for transmitting messages in a
2 telecommunication network comprising a communication server and at least one
3 wireless telephone, said server comprising means for sending messages to said
4 at least one [or more] wireless telephones, the wireless telephone [or telephones
5]being equipped with means for storing and processing messages, characterized
6 in that [it] said method comprises:

7 - a step for sending a message (Mess-Serv) comprising a first field (V-
8 TYP) containing information relative to the type profile of [the] a recipient of the
9 message, and

10 - a step for processing the message received by the recipient and for
11 comparing the profile contained in [this] said message (Mess-Serv) with a user's
12 subscriber profile stored in the memory of the wireless telephone, and

13 - a step for storing the message in the storage means of the wireless
14 telephone if the user's subscriber profile is compatible with the type profile
15 contained in the message.

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1 18. (Amended) [Method] A method according to claim 17,
2 [characterized in that] wherein the wireless telephone [or telephones] comprise
3 display means, the method including a step for displaying messages upon
4 occurrence of events specified in a field of the message.

1 19. (Amended) [Method] A method according to claim 17,
2 [characterized in that it includes] further including a step for sending an
3 acknowledgement of receipt of the message.

1 20. (Amended) [Method] A method according to claim 17,
2 [characterized in that it includes] further including a step for sending an
3 acknowledgement of receipt of the message, the acknowledgement of receipt
4 being accompanied by the profile of the user that received the message.

1 21. (Amended) [Method] A method according to claim 17,
2 [characterized in that it includes] further including a step for sending a notification
3 from the wireless telephone to the server, containing a number of times a given
4 message has been displayed, the profile of the wireless telephone that displayed
5 it, and data identifying the number of the message displayed and sent by an
6 advertising client, as well as data identifying the advertising client.

1 22. (Amended) A method according to claim 17 further including the
2 step of [Utilization of the transmission system according to any of claims 1

3 through 16 to investigate services offered, characterized in that the server
4 comprises an algorithm for] logging and extracting statistics from notifications or
5 acknowledgements of reception received from the wireless telephone [or
6 telephones in the transmission system] using an algorithm in the server.

1 --23. (new claim) A method for utilizing services offered by a service
2 provider via a message transmission system comprising a telecommunication
3 network including a communication server (4) and at least one wireless
4 telephone (1) comprising sending a message to said at least one wireless
5 telephone, storing the message in the wireless telephone, processing the
6 message in the wireless telephone, each message (Mess-Serv) comprising a
7 first field (U-TYP) containing information relating to the type profile of the
8 recipient of the message, comparing the profile stored in the wireless telephone
9 relative to the subscriber using the wireless telephone with the profile contained
10 in the message and authorizing the storage of the message in a memory in the
11 wireless telephone if the profile of the subscriber using the wireless telephone is
12 compatible with the type profile contained in the first field of the message.

24. (new claim) A method according to claim 23 further including logging and extracting statistics from notifications or acknowledgements of reception received from the wireless telephone using an algorithm in the server.--

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An Abstract showing the changes using brackets and underlining follows:

ABSTRACT

[SYSTEM AND METHOD FOR TRANSMITTING MESSAGES AND USE OF SAID SYSTEM FOR TRANSMITTING MESSAGES FOR INVESTIGATING SERVICES THAT ARE PROVIDED]

The present invention relates to a message transmission system comprising a telecommunication network (2) comprising a communication server (4) and at least one wireless telephone (1), the server comprising means for sending messages to one or more wireless telephones, the wireless telephone or telephones (1) being equipped with means for storing and processing message (Mess-Serv), characterized in that the messages (Mess-Serv) comprise a first field (V-TYP) containing information relating to the type profile of the recipient of the message and in that the processing means compare the profile stored in each wireless telephone relative to the subscriber using the wireless telephone to the profile contained in the message, and authorize the storage of the messages in the storage means if the profile of the subscriber using the wireless telephone is compatible with the type profile contained in the field of the message.

[Fig. 1]

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SYSTEM AND METHOD FOR TRANSMITTING MESSAGES AND USE OF SAID SYSTEM FOR TRANSMITTING MESSAGES FOR INVESTIGATING SERVICES THAT ARE PROVIDED

5 The present invention relates to a system and a method for transmitting messages, and the utilization of the transmission system to investigate services offered, for example in a wireless telephone network, for example of the GSM type.

The GSM system is currently well known, widely used, and accessible to a large number of people. It comprises a network constituted by servers connected to
10 radiocommunication beacons, and by a set of wireless telephones equipped with a SIM card. The SIM card is an electronic circuit linked to a terminal, such as a wireless telephone, either by contact pads or by a contactless connection, for example via radio frequencies. The electronic circuit of the SIM card comprises an integrated circuit that incorporates a microprocessor and a programmable nonvolatile memory comprising all of
15 the information required by the user and the operator. The wireless telephone comprises means for communicating with the SIM card, and the communication takes place in accordance with the ISO 7816-3 standard, which is a general standard, and in accordance with the ETSI standards specific to wireless telephones.

According to the ETSI standards, the SIM card can send and receive "short
20 messages" called "SMS." These messages are standardized under the GSM standards 03-40 for transporting messages, 03-48 for transport security, 11.11 and 11.14 for the operations performed by the card. Short messages are codified by means of control characters (identifier, sender's address, number of bytes, etc.) and data displayed on a wireless telephone. There are two types of short messages, depending on the recipient:
25 "SMS-PP" messages of the point-to-point type, and "SMS-CB" messages for "cell broadcast." SMS-PP messages have a header that specifically defines the subscriber to whom the message is sent. SMS-CB messages, on the other hand, are "broadcast": the sender does not know who will receive them. In this case, all connected wireless telephones located in the reception area receive the message. The short message is then
30 transmitted to the card, which decodes it. At the same time, an acknowledgement-of-receipt message can be sent to the sender. This type of message is used, for example,

when travelers arrive in airports: the radiocommunication beacon continuously sends data related to hotel occupancy, car rental agencies, the exchange rate of the local currency, etc.

The contents of short messages can be stored in a message file "EF-SMS" of the programmable memory of the SIM card. It is also possible to store short messages in various files, either based on the type of the application, for example, hotels, car rental agencies, etc., or based on the sender of the message, for example a travel advertiser. The subscriber consults his SIM card in order to see the data it has recorded. The data of the short message can contain a telephone number, which the user calls in order to use the service offered.

The GSM system makes it possible to transmit data from one or more service providers to a subscriber or to a group of subscribers. During a telephone communication, the parties are identified; thus a service provider can know which subscriber is calling it. Likewise, during the reading of a short message, as long as the wireless telephone can communicate with the GSM network, application notifications can be sent to the server specified in the header of the short message. However, the server cannot determine the number of subscribers who have received the message and have not called. Therefore, the server cannot establish statistical data on the impact of its messages. Finally, the server cannot know the characteristics of the subscribers who have called, in order to determine the types of people interested in its messages.

Another drawback of the prior art is the fact that all the short messages are systematically stored in the memory of the SIM card, even those that hold no interest for the subscriber. Thus, the memory of the SIM card can quickly be filled up with data that is useless to the subscriber.

The object of the present invention is to develop a transmission system that makes it possible to select target recipients.

This object is achieved through the fact that the message transmission system comprises a telecommunication network comprising a communication server and at least one wireless telephone, the server comprising means for sending messages, communicates with one or more wireless telephones, the wireless telephone or telephones being equipped with means for displaying and means for storing and processing

messages, is characterized in that the message comprises a first field containing information relating to the type profile of the recipient of the message, and in that the processing means compare the profile stored in each wireless telephone relative to the subscriber using the wireless telephone with the profile contained in the message and
5 authorize the storage of the messages in the storage means if the profile of the subscriber using the wireless telephone is compatible with the type profile contained in the field of the message.

According to another characteristic, the messages comprise a second field containing a reference address of the server, and the processing means store information
10 on the utilization of the messages, said information being sent to said server.

According to another characteristic, the processing means are constituted by a service module, which is automatically configured during its activation based on selection conditions contained in a third field.

According to another characteristic, the service module is written in a high-level
15 language interpreted by the virtual machine of a SIM card.

According to another characteristic, the service module includes means for sending an acknowledgement of receipt of the message stored based on selection data contained in a third field.

According to another characteristic, the service module includes means for
20 sending an acknowledgement of receipt accompanied by the profile of the user of the wireless telephone, based on selection data contained in the third field of the message.

According to another characteristic, the service module comprises means for activating the display of each message based on selection data contained in the third field of the message.

25 According to another characteristic, the selection data includes a first counter of the number of displays.

According to another characteristic, the selection data includes a second counter of display initializations.

30 According to another characteristic, the selection data includes an indicator of the display mode, chosen from several possible modes

According to another characteristic, the display modes are parameterizable and multiple.

These modes correspond to at least:

- 5 a) the mode for displaying the message every N times the wireless telephone is turned on;
- b) the mode for displaying the message every N times a call is made by the subscriber;
- c) the mode for displaying the message every N times a call is made to a particular number;
- 10 d) the mode for displaying the message every day starting at a given time;
- e) the mode for displaying the message every time a call ends;
- f) the mode for displaying the message when chosen by the user while running through the menu.

15 According to another characteristic, the service module comprises an algorithm for transforming the message based on a user profile stored in the SIM card.

According to another characteristic, the service module comprises an algorithm for processing constants and replacing them with names and vice versa.

20 According to another characteristic, the service module includes means for sending notifications, the notifications containing the number of displays, the profile of each user, data identifying the message number and the advertising client.

Another object of the invention is to offer a method for transmitting messages.

25 This object is achieved through the fact that the method for transmitting messages in a telecommunication network comprising a communication server and at least one wireless telephone, said server comprising means for sending messages to one or more wireless telephones, the wireless telephone or telephones being equipped with means for displaying and means for storing and processing messages, is characterized in that it comprises:

- a step for sending a message comprising a field containing information relative to the type profile of the recipient of the message;

- a step for processing the message received by the recipient and for comparing the profile contained in this message with the user's subscriber profile stored in the memory of the wireless telephone; and

5 - a step for storing the message in the storage means of the wireless telephone if the user's subscriber profile is compatible with the type profile contained in the message.

According to another characteristic, the method includes a step for displaying messages upon occurrence of events specified in a field of the message.

According to another characteristic, the method includes a step for sending an acknowledgement of receipt of the message.

10 According to another characteristic, the method includes a step for sending an acknowledgement of receipt of the message, the acknowledgement of receipt being accompanied by the profile of the user that received the message.

15 According to another characteristic, the method includes a step for sending a notification from the wireless telephone to the server containing the number of times a given message has been displayed, the profile of the wireless telephone that displayed it, and data identifying the number of the message displayed and sent by an advertising client, as well as data identifying the advertising client.

20 A final object of the invention is to offer a system for investigating the utilization of services offered by wireless telephones, this investigation system allowing the use of the message for advertising or promotional purposes.

This object is achieved through the fact that the transmission system is used to investigate services offered by the server, which comprises an algorithm for logging and extracting statistics from notifications or acknowledgements of receipt received from the wireless telephone or telephones of the transmission system.

25 Other characteristics and advantages of the present invention will emerge more clearly from the reading of the following description, given in reference to the attached drawings, in which:

- Fig. 1 represents a schematic view of the components of the message transmission system;
- 30 - Fig. 2a represents the software components installed in each station of the advertising client;

- Fig. 2b represents the software components installed in each server of the network;
- Fig. 2c represents software the components and the information stored in the SIM card with which each wireless telephone is equipped;
- 5 – Fig. 3a represents the profile file stored in the memory of the SIM card with which each wireless telephone is equipped;
- Fig. 3b represents the structure of the selection message sent by each client station to the server, to which they are linked via a hard-wired network;
- 10 – Fig. 3c represents the structure of each transport message sent by the server upon reception of a selection message from a client;
- Fig. 4 represents the structure of the file stored in the nonvolatile memory of the SIM card with which each wireless telephone is equipped;
- Fig. 5 represents the structure of the notification messages or
15 acknowledgements of receipt returned by each wireless telephone to the server that sent a given message.

The system of the invention comprises, as represented in Fig. 1, a land-based system constituted by a server (4) that delivers the specific advertising service, this server (4) being connected by a link to the short message processing center SMS (3) which
20 communicates through the GSM network with one or more wireless telephones (1). Each of the wireless telephones (1) is equipped with a SIM card (11). The general architecture of the integrated circuit contained in the SIM card is generally constituted by a microprocessor connected to a link bus that is linked to the memories (110) of the card. The memories can be of various types, and may or may not be programmable or volatile,
25 and in general the SIM card includes a combination of these various types. The operating system and the virtual machine in a high-level language of the "Java" type are included in a nonvolatile memory, and specific service modules (111) developed in a high-level language such as "Java" can also be stored, either in the programmable nonvolatile memory or in the read-only memory. These specific service modules are programs which,
30 when installed in a programmable nonvolatile memory, can be downloaded into the SIM cards (11) of GSM wireless telephones (1). The server (4) at the operator's location

includes a server program (40, Fig. 2b) that makes it possible to communicate via links with the short message center SMS (3), and via the network (45) with a set (5) of client stations (50-51-52). Each client station (50, 51, 52) includes a client program specific to the services (60-61-62) that the respective clients (C0-C1-C2), advertisers and service providers, wish to broadcast through the wireless telephone network.

As the execution of a program in a station generally results in a display urging a user to perform certain actions, the specific client programs are represented by the part (60, 61, 62) that is visible on the screen, but it should be understood that these programs are stored in the memory of each client station and executed by the respective processor, and that each client station includes the same software module, called a client module, represented for the client C0 in Fig. 2a.

The software installed in each client station is represented in Fig. 2a. This software includes an inverse algorithm (601) for replacing elements of the profile with constants, a second algorithm (602) for factoring the various messages with different profiles in order to generate generic messages, and an interface (603) that allows communication with the server (4) using a protocol such as, for example, the TCP/IP protocol. Finally, the program of the client station also includes a graphical interface (604) that makes it possible either to display messages or icons for communicating with the advertising client and to allow the entry of the desired messages and profiles, or to display histograms or graphics generated by the statistics gathered.

Fig. 2b represents the various modules constituting the program (40) of the network server (4). A first module (401) is constituted by the logging and statistics algorithm. A second module (402) handles the billing of the advertising client. A third module (403) handles the reception of the messages from the advertising client and their transmission to the SMS center (3) of the GSM network (2). Finally, a fourth module (404) handles the reception of notification or acknowledgement messages (Not-Ack) from the client using the wireless telephone (1) or from another SMS center of the GSM network. Fig. 2c represents the software layer required for the operation of the SIM card (11) of the user client. This software layer is constituted by an operating system OS, an application program interface API, and a virtual machine VM. The application program interface API allows communication between the operating system and the virtual

machine VM. The virtual machine VM is constituted by a high-level language interpreter that makes it possible to interpret instructions from either the service module specific to the invention (111), or from other modules such as the service module N. This specific service module (111) comprises:

- 5 - an algorithm (1110) for receiving and transforming messages based on the profile of the card;
- an algorithm (1111) for searching for messages having the telephone number entered on the keypad by the user;
- a third algorithm (1112) for searching for a display following an external event;
- 10 - a fourth algorithm (1113) for searching for available space;
- and finally, a fifth algorithm (1114) for processing constants and replacing them with names.

The integrated circuit constituting the SIM card (11) also includes a so-called call verification algorithm (112), and the data files transmitted by the operator network to the
15 SIM card of the user client are stored in a file (V-DATA) of a memory (114) organized in directory form. The profiles (113, Fig. 4) include the display control information (V-AFF) that allows a subscribing user to consult them at certain times. These profiles (113) are also stored in a nonvolatile part of a programmable memory of the SIM card. The software (40) of the network server (4) is responsible for handling the sending of
20 messages to subscribers, the monitoring of returned messages, the statistical calculation of the utilization of the messages to be displayed, and the downloading of these results to the various service-providing and advertising clients. The software (60, 61, 62) of the advertising client station makes it possible to design the messages to be displayed and the selection messages according to the invention, to send them to the server and to deliver to
25 the service-providing client the statistical results received from the server (4).

To begin with, the graphical interface (604) allows the service provider to generate short messages which will subsequently be sent through the network (2), whose impact on the subscribers it wants to know. These selection messages (Mess-Cli) contain display control data (V-AFF). Once these messages (Mess-Cli) are generated, a client
30 station (50 or 51 or 52) transmits them to the network server (4) which, using its send algorithm (403) sends transport messages (Mess-Serv) to a certain number of selected

subscribers, using the point-to-point mode SMS-PP or broadcast mode SMS-CB. Third, the server (4) receives data on the utilization by the various subscribers of the messages sent through the network. The software of the server (4), via its logging algorithm (401), stores the data received, incorporates it into statistical tables, and sends it to the station of the respective client (C0, C1, C2). Finally, the advertising client or service provider consults the statistics in its client station in order to learn the impact of these messages and, if necessary, to modify the messages and re-send them through the network server (4).

The programs (111) incorporated into the SIM card constitute primitives and make it possible to receive the messages that reach the wireless telephone (1) through the network of the operator (2), process them so as to extract those that concern the subscriber, display them and send acknowledgements of receipt or notifications to the server of the network (4).

The SIM card belongs to the operator, which then transmits it to a subscriber. The subscriber is listed by a unique number contained in his card, so the subscriber is completely authenticated by it. The wireless telephone is an object that can only be used by a subscriber on the condition that it contains a SIM card. The SIM card is widely specified by the standard known as ETSI – GSM 11.11. The SIM card has an operating system capable of processing the information received by the wireless telephone and contained in a programmable nonvolatile memory. This memory contains data files configured for the GSM application. The operating system includes one part written into the ROM and another part written into the programmable memory. The primitives are stored in dedicated fashion in the programmable memory, thus making it possible to add new functions or to modify the existing primitives, but it is also possible to write them into the ROM. Advantageously, the primitives are written in high-level language, and interpreted during their execution by a virtual machine. In the remainder of the document, the operating system is considered to be the executable program stored in the ROM and/or downloaded into the programmable memory, and the primitives are considered to constitute the program that implements the invention in the card.

As seen above, the messages are stored in a file upon reception. According to the present invention, the messages received by the SIM card are interpreted by the

primitives of the algorithm (1110), which fulfills the function of a filter on the data of the transport message (Mess-Serv). Only the transport messages (Mess-Serv) that satisfy certain criteria make it possible to store the message to be displayed: these criteria are linked to the subscriber's profile (115). This profile includes the name, date of birth (thus determining the subscriber's age), sex, subscription type (which may provide an indication of the revenue from the subscriber and the geographical area of the subscriber's movements). This information is stored in a file of the SIM card called "PROFILE." The writing of data into this file is subject to some conditions, for example, the correct presentation of the user identification code. It may be read openly. When this data is absent or unusable, or when the file PROFILE does not exist, the primitives of the SIM card do not perform any filtering.

The data in the file PROFILE (115) are written in a structure that is standard in microprocessor cards, which corresponds to the structure T, L, V. The structure of the file PROFILE is represented in Fig. 3a. T is the identifier of the data, L is the length in bytes, and V is the data. The data are written in the form of BCD codes for numerical values and ASCII for alphabetic codes.

In the example of Fig. 3a, the subscriber whose name is "Stéphane Rose" was born in 1960, is male and has a type 2 subscription, whose rate includes 4 hours of communication per month. The file PROFILE is created in the customization phase of the SIM card. When the subscriber receives his SIM card at the same time as his subscription, by means of a primitive ("INI-PRO") (116, Fig. 2C) for updating the file PROFILE, the subscriber or a user authorized by the subscriber writes the information related to him into this file. The writing of this information is conditioned by the correct presentation of the user identification code. Other primitives are capable of processing the information contained in the file PROFILE (115).

An advertising client and service provider generates a message to be displayed (V-DATA), which is itself incorporated into a selection message (Mess-Cli) in a client station. It enters, into specific fields that appear on a screen (60, 61, 62), the data that will be displayed on the wireless telephone, as well as the type profile of the subscriber who may be interested in the message to be displayed. The message is said to be "multi-profile" since it can be suitable for subscribers whose profile data is different. The age is

entered in the client station in the form of an interval between two years of birth, for example 1950 to 1980. If there are several possible subscription types, the numbers corresponding to each of the types are listed, separated by commas. If a subscription time is specified, the number of hours is indicated, for example 4 hours.

5 This operation, called "typing," makes it possible to create in the memory of the client server (60, 61, 62) a table summarizing the information entered by the service provider. Having incorporated the three criteria mentioned above – age, sex and subscription – the table in the client station (50, 51, 52) is, for example, entered into the field V-TYP of Fig. 3c.

10 The service provider also enters into the selection message the display mode (V-AFF) of the message to be displayed. The client module formats the data in the specific fields according to their characteristics. Each element of the short message is codified and is presented in a structure with three fields T, L V, in which the field T contains the identifier of the data, L contains the number of bytes in the data, and V contains the data.

15 The typical structure of a selection message (Mess-Cli) sent by a client is represented in Fig. 3b.

In this figure, the field V-TYP contains the multi-profile information, the field V-AFF contains the information on the display mode for the subscriber, and the field V-DATA contains the data to be transmitted to the subscriber. These are the ASCII codes
20 containing the messages. The field Adr-CLI is the address of the client. The field FSi-j is the message number: it is based on a service provider reference owned by a client (FSi) and a number "j" of a message posted by this client module.

The information linked to the display mode is contained in the field V-AFF, which is divided into three parts, for example of one byte each. The first part comprises
25 three indicators: a first "ACK" (bit 7), a second "ACK-PRO" (bit 6) and a third "INDIC-AFF" (bit 2,1,0). A fifth bit Te requests the receipt of an erasure notification. The fourth bit is reserved. The second part contains: a first numerical value constituting a counter "CPT-AFF" and the third part contains a second numerical value constituting a second counter "INI-AFF." Each of the parts being represented by one byte, V-AFF is therefore
30 composed of three bytes.

If the bit of the first indicator ACK (bit 7) is at "1," an acknowledgment of receipt is sent when the message (Mess-Serv) is received in the subscriber's card. The acknowledgement of receipt is sent to the server (4) via the wireless telephone (1) and the network, in the structure represented in Fig. 5, which will be described below. If the bit
5 ACK is at "0," all of the messages sent are considered to have actually been received by their recipients; this is generally the case.

If the bit of the second indicator ACK-PRO (bit 6) is at "1", the subscriber's profile stored in the file PROFILE of the card (11) is sent to the network server (4) at the time of the acknowledgement of receipt and at the time of each notification issued, for
10 example, during the reading of the message by the subscriber. Thus, the server (4) can know the exact profile of the interested subscribers, and even the uninterested subscribers (for this reason, the bit of the first indicator ACK must also be set at "1").

The third indicator INDIC-AFF contains the conditions for activating the display on the mobile telephone, which are read by the service module (111) during its activation and used to automatically configure the service module. This makes it possible to make
15 the service module (111) entirely generic, including the search and display algorithm (1112).

If the value of the indicator INDIC-AFF is equal to "0010," then the message is displayed during each of the subscriber's calls. The value of the second counter INI-AFF
20 represents the number of times that the message should be displayed. During the storing of the message to be displayed (V-DATA) in the storage file EF-Mem of the memory (114), the primitive updates the content of the first counter CPT-AFF to "00." With each telephone call, the message stored in V-DATA is output by the card and is displayed on the display device of the wireless telephone. Then, the value contained in the first counter
25 CPT-AFF is incremented. When the value of the first counter CPT-AFF becomes equal to the value contained in the second counter INI-AFF the message is no longer sent by the card. The message is no longer displayed automatically, and will be erased when a more recent message takes its place through the execution of the algorithm (1113) for searching for available space.

30 If the value of the indicator INDIC-AFF is equal to "0011," then the message is displayed with every N times the subscriber makes a call. The value of the second

counter INI-AFF, in this case, represents the number of intervening calls between two displays of messages on the wireless telephone. The value of the first counter of CPT-AFF represents the number of times that the message is displayed. During the storing of the message in the storage file EF-Mem, the primitive (1113) updates to "00" the content of a working byte OT in the RAM (118) of the card. Then, the value contained in this working byte OT is incremented with each call. When its value becomes equal to the value contained in the second counter INI-AFF, and as long as the value of the first counter CPT-AFF is not equal to "00," then the message to be displayed contained in V-DATA is sent by the card and displayed on the wireless telephone (1). The value of the counter CPT-AFF is decremented, and the value of INI-AFF is written into the working byte. When the value of the first counter CPT-AFF becomes equal to "00," then the message is no longer displayed automatically; it will be erased when a more recent message takes its place.

If the value of the indicator INDIC-AFF is equal to "0100," then the message is displayed each time the wireless telephone (1) is turned on, which corresponds to each time the subscriber connects to the network. The value of the second counter INI-AFF in this case corresponds to the number of times that the message is displayed. During the storing of the message in the storage file EF-Mem, the primitive (1116) updates to "00" the content of the first counter CPT-AFF. With each call to be displayed, the data of the message contained in the field V-DATA of the storage file EF-Mem is output from the card and displayed by the wireless telephone. Then, the value contained in the first counter CPT-AFF is incremented. When the value of the first counter CPT-AFF becomes equal to the value contained in the second counter INI-AFF, the message to be displayed (V-DATA) is no longer sent by the card. The message is no longer displayed automatically; it will be erased when a more recent message takes its place.

If the value of the indicator INDIC-AFF is equal to "0101," then the message is displayed every N times the wireless telephone is turned on. The value of the second counter INI-AFF represents the number of times it is turned on between two displays of the message on the wireless telephone, and the value of the first counter CPT-AFF represents the number of times that the message is displayed. During the storing of the message in the storage file EF-Mem, the primitive updates to "00" the content of a

working byte (OT) in the RAM (118) of the card. After that, the value contained in this working byte (OT) is incremented with each call by the user. When its value becomes equal to the value contained in the second counter INI-AFF, and as long as the value of the first counter CPT-AFF is not equal to "00," then the message is sent by the card and displayed on the wireless telephone: the value of the first counter CPT-AFF is decremented and the value of the second counter INI-AFF is written into the working byte. When the value of the first counter CPT-AFF becomes equal to "00," then the message is no longer displayed automatically; it will be erased when a more recent message received from the server (4) takes its place.

The protocol between the card and the wireless telephone that makes it possible to display messages is called the "SIM Toolkit protocol." It is specified in the ETSI -11.14 standard.

The server (4) receives the selection message (Mess-Cli) coming from the client (C0, ...C2). It adds to the selection message a last field containing its address (Adr-Serv) so that the wireless telephone returns to it an acknowledgement of receipt of the transport message (Mess-Serv) and the utilization data of the message to be displayed (V-DATA). If the transport message is the SMS-PP type transmitted point-to-point, the addresses of the sender (Adr-CLI) and the recipient (a SIM card) are indicated in the transport layer.

Through the GSM network, the wireless telephone receives the message (Mess-Serv) whose structure, represented in Fig. 3c, corresponds to that of the selection message (Mess-Cli) with an added field containing the address (Adr-Serv) of the server (4).

The wireless telephone (1) recognizes from the transport layer of its operating system that this is an SMS message and transmits it to the SIM card (11). The latter decodes the various fields based on their identifiers T and activates the primitive (1110) for receiving a new message. If the bit ACK is at "1," an acknowledgement of receipt is sent to the server (4) whose address is specified in the server address field (Adr-Serv), or in the transport layer if it is a short message of the SMS-PP type.

After decoding, the message to be displayed (V-DATA) is normally stored in a storage file called "EF-Mem." To begin with, the primitive, using the algorithm (113), checks to make sure that the message has not already been recorded; this check is performed by comparing the message numbers FSi-j and server address field values (Adr-

Serv) of the messages already stored in a specific file EF-MES with those of the message received. If the message is actually new, then the primitive tests to see if the subscriber profile contained in the memory (PROFILE) is compatible with the typing data (V-TYP) contained in the message (Mess-Serv).

5 The first field of the typing data "AGE" is then checked. In the above example, the subscriber was born in 1960 and the message received is intended for subscribers born between 1950 and 1980, so this message may be intended for him. Next, the operating system checks the second field "SEX"; the subscriber is also male, so this message may be intended for him. Finally, the field "SUBSCRIPTION" is tested. The
10 subscriber has, for example, a type 2 subscription, whereas the message is intended for those having type 1, 3 and 4 subscriptions. Therefore, this message is not intended for him; it is not stored in the SIM card and the subscriber will not know about it. Assuming that the profile of the subscriber stored in the memory PROFILE (115) is compatible with the type V-TYP of the message received, then the message to be displayed is stored in the
15 storage file EF-Mem and the SIM card sends an indication to the wireless telephone.

A first improvement consists of establishing a grammar for interpreting the transport messages (Mess-Serv) coming from the server. This grammar can have the same syntax as the language PASCAL, i.e., adopting instructions such as IF, THEN, ELSE or CASE (1): ... (2): ... (3):With a grammar of this type, it is possible to
20 associate different data blocks in the same message so that, depending on the case, one message is displayed rather than another. For example, it is possible to specify that: IF the subscriber was born between 1950 and 1959 THEN a first message is displayed, ELSE another message is displayed. Another example consists of conditioning the message based on the subscription type: IF the subscription is "1," then display "message
25 1"; IF the subscription is "2," then display "message 2"; IF the subscription is "3," then display "message 3"; etc.

A second improvement consists of using, in the card and in the client station, a constant file (CONSTANT), which makes it possible to reduce the size of the messages. The constant file (CONSTANT) is a table with as many lines as there are constants. The
30 constants are referenced by a code associated with a character string or with an address. As stated above, the field (V-DATA) of a transport message (MES-SERV) contains data

to be displayed on the wireless telephone (1), and said data are coded in ASCII. For example, the year 1999 is coded in the form of four ASCII codes: 31H, 39h, 39h, 39h. Since this character string is used often, it is useful to replace it with a code, 89h for example. In the constant file (CONST), a line comprises the following data: the code "89," followed by a byte containing the size of the character string, and finally, the character string 31H, 39h, 39h, 39h. The primitive (1112) for displaying the data of the message reads the data to be displayed; as long as the value of the bytes corresponds to a displayable ASCII code (displayable codes have values between 20h and 7Fh), the primitive (1112) of the card transmits them as is to the wireless telephone (1). If the value of the byte read does not correspond to a displayable ASCII code, then the primitive (1114) will search in the constant file (CONST) for the character string that corresponds to this value. If the value in the constant file (CONST) has a value corresponding to the size of the character string equal to "00," then the two bytes that follow correspond to an address in four bytes. In this case, the primitive (1114) will take as a character string whatever is stored at the address specified in these four bytes. The four bytes represent the reference of the file in which the string is located (in two bytes) and the address within this file (in two bytes).

After a display of the message, if the subscriber is interested, he calls the service provider whose address or telephone number is found in the data field (V-DATA) of the received message to be displayed. The call can be simplified by the display of the address or the number on the wireless telephone, and by a particular key that makes it possible, when the subscriber presses it, to compose said address or said number on the wireless telephone.

The storage file EF-Mem, represented in Fig. 4, is organized in the form of a table having as many lines as there are short messages to be stored. When the user wants to consult the messages stored in his SIM card, he interrogates his wireless telephone, and the latter sends commands for reading the SIM card. During each reading by the wireless telephone of the SMS message referenced i, a call notification is sent to the server (4).

The size of the storage file EF-Mem is a direct function of the quantity of messages it can contain. Given a memory of 8 or 16 Kb, which is standard for a SIM card, the storage file EF-Mem should have a size on the order of one Kb.

In the above example, the storage file EF-Mem contains three messages. The first was sent by the service provider identified "FS1" and the number of its message is "103"; the content of the message to be displayed contains 30 bytes. The notification to be sent when this message is used is sent to server number 3, whose address is equal to V-SPAC₃. The second message was sent by the service provider "FS3"; its number is "65"; the notification to be sent when this message is used is sent to server number 2, whose address is equal to V-SPAC₂. An improvement consists of creating a fifth column in the body of the storage file EF-Mem; information related to the way in which the message is used is stored in it.

When the file is full, a new message is stored by the primitive (1113) by erasing one or more messages. In an intrinsically known way, this primitive first erases the oldest messages in order to free up enough space for the new message. This management requires a pointer (PdM) indicating the last message entered (the most recent). Since the reading of the stored lines is done in circular fashion, the message located immediately before the one pointed to is the oldest.

As stated above, a notification to the server (4) specified in the storage file EF-Mem is sent at the time of each utilization. This notification contains the same information as the acknowledgement of receipt that may be sent when the message is written into the file. The structure of a notification or an acknowledgment of receipt appears in the form represented in Fig. 5.

A notification or an acknowledgement comprises the following information:

- an identifier (Tn for a notification or Ta for an acknowledgement of receipt)
- a byte length value of the data field that follows
- a message number FS_{i-j}
- possibly the subscriber's profile data as read in the file PROFILE (if the bit ACK-PRO and the bit ACK stored in V-AFF are at "1").

An improvement of the invention consists of sending a notification to the server (4) during the erasure of the message in the storage file EF-Mem of the SIM Card, triggered by the primitive (113). This transmission can be controlled by a bit of V-AFF, the fifth bit, for example referenced "Te." The identifier Te of such a notification is specific. The server (4) is warned that the message to be displayed (V-DATA) is no

longer in the SIM card. It can then re-send it if it thinks this message is important. The service provider can request that this message be displayed regularly during a certain period, for example one month; if this message is erased, as long as the period has not elapsed, the server resends it. It is also possible to authorize the subscriber to erase the message in the storage file EF-Mem; if this erasure occurs after the first display, it may be assumed that the subscriber is not interested in it. This information is useful for the statistical operation performed by the server (4).

The server (4) receives the various notifications and/or acknowledgements of receipt and calculates statistical data on the utilization of the messages. For this reason, it has a memory of large size, constituted by a computer hard disk, in which the messages coming from the various clients (C1, ..., Cn) are stored, as well as the notifications and acknowledgements of receipt coming from the various subscribers.

Each message coming from a client (C1, ..., Cn) is referenced by its message number FSi-j. This number also being present in the notification and acknowledgement of receipt messages, the server can therefore, using the primitive (405) for sorting notifications from acknowledgments, sort the notifications or acknowledgments in its memory based on the advertising client numbers. It counts, in a specific field associated with the message, the number of acknowledgements of receipt and the number of notifications. The server (4) also analyzes the profile sent in the notification or the acknowledgement and can thus establish the type profiles of the subscribers.

Let the message whose type profile determined by the advertising client be the following:

| | | |
|-----------|---|---------------|
| 1950-1980 | M | 1, 3; 4 hours |
|-----------|---|---------------|

After it is broadcast by the network, and upon reception of a notification or acknowledgement of receipt, the server can establish, for example, the statistical report below.

1 - Number of subscribers having sent only the acknowledgement of receipt (no display, the message was not stored): 1405

Age 17% are from 10 to 19 years old
 33% are from 20 to 29 years old

28% are from 30 to 39 years old, etc.

Sex 39% are male

61% are female

Subscription 14% have a subscription "1"

49% have a subscription "2", etc.

5

2 - Subscribers having sent at least one display notification: 508

| | | | | | | | | |
|-----------------------|-----|-----|----|----|----|---|---|---|
| Number of displays | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Number of subscribers | 192 | 156 | 84 | 56 | 12 | 5 | 1 | 0 |

10 Although particularly adapted to advertising applications, the present invention
can be used in other fields. For example, it can be used by a travel provider. The trips are
defined by a departure point, a destination, a date and a price; the card compares the
user's profile with the elements of the trip that are transmitted to it and selects trips,
giving them order of priority. The travel provider can thus adapt its offer based on the
wishes (and hence the profiles) of the subscribers. The present invention has been
15 described in its utilization with a GSM type system, but it can be used in any other
communication system, whether or not it is wireless.

CLAIMS

1 1. Message transmission system comprising a telecommunication network
2 (2) comprising a communication server (4) and at least one wireless telephone (1), the
3 server comprising means for sending messages to one or more wireless telephones, the
4 wireless telephone or telephones (1) being equipped with means for storing and
5 processing messages (Mess-Serv), characterized in that each message (Mess-Serv)
6 comprises a first field (V-TYP) containing information relating to the type profile of the
7 recipient of the message, and in that the processing means compare the profile stored in
8 each wireless telephone relative to the subscriber using the wireless telephone with the
9 profile contained in the message and authorize the storage of the message in the storage
10 means if the profile of the subscriber using the wireless telephone is compatible with the
11 type profile contained in the field of the message.

1 2. Message transmission system according to claim 1, characterized in that
2 the message comprises a field containing a reference address of the server and in that the
3 processing means store information on the utilization of the messages, said information
4 being sent to said server.

1 3. System according to claim 1, characterized in that the processing means
2 comprise a service module (111) that is automatically configured during its activation
3 based on selection conditions contained in a second field (V-AFF).

1 4. Message transmission system according to claim 3, characterized in that
2 the service module is in a high-level language interpreted by the virtual machine of a SIM
3 card.

1 5. Message transmission system according to claim 3, characterized in that
2 the service module includes means for sending an acknowledgement of receipt of the
3 message stored based on selection data (ACK) contained in a third field (V-AFF).

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1 6. System according to claim 3, characterized in that the processing means
2 include means for sending an acknowledgement of receipt accompanied by the profile of
3 the wireless telephone user based on selection data (ACK-PRO) contained in a third field
4 (V-AFF) of the message.

1 7. System according to claim 5, characterized in that the service module
2 comprises means for activating the display of each message based on selection data
3 (INDIC-AFF, CPT-AFF, INI-AFF) contained in the third field (V-AFF) of the message.

1 8. System according to claim 7, characterized in that the selection data
2 includes a counter of a number of displays (CPT-AFF).

1 9. System according to claim 7, characterized in that the selection data
2 includes a second counter of a number of display initializations (INI-AFF).

1 10. System according to claim 6, characterized in that the selection data
2 includes an indicator (INDIC-AFF) of the display mode chosen from several possible
3 modes.

1 11. System according to claim 10, characterized in that the display modes are
2 parameterizable and multiple and correspond to at least:

- 3 a) the mode for displaying the message every N times the wireless telephone is
- 4 turned on;
- 5 b) the mode for displaying the message every N times a call is made by the
- 6 subscriber;
- 7 c) the mode for displaying the message every N times a call is made to a
- 8 particular number;
- 9 d) the mode for displaying the message every day starting at a given time;
- 10 e) the mode for displaying the message every time a call ends;
- 11 f) the mode for displaying the message when chosen by the user while running
- 12 through the menu.

1 12. System according to claim 3, characterized in that the service module
2 comprises an algorithm (1110) for transforming the message based on a utilization profile
3 stored in the SIM card (11).

1 13. System according to claim 3, characterized in that the service module
2 comprises an algorithm (1114) for processing constants and replacing them with names
3 and vice versa.

1 14. System according to claim 3, characterized in that the service module
2 comprises an algorithm (1112) for searching for a display following an external event.

1 15. System according to claim 3, characterized in that the service module
2 includes means for searching for available space for storing new messages and erasing
3 the messages displayed the number of times provided for (1113).

1 16. System according to claim 8, characterized in that the service module
2 includes means for sending notifications, the notifications containing the number of
3 displays, the profile of each user, and data identifying the advertising client.

1 17. Method for transmitting messages in a telecommunication network
2 comprising a communication server and at least one wireless telephone, said server
3 comprising means for sending messages to one or more wireless telephones, the wireless
4 telephone or telephones being equipped with means for storing and processing messages,
5 characterized in that it comprises:

- 6 - a step for sending a message (Mess-Serv) comprising a field (V-TYP)
7 containing information relative to the type profile of the recipient of the message, and
- 8 - a step for processing the message received by the recipient and for comparing
9 the profile contained in this message (Mess-Serv) with a user's subscriber profile stored
10 in the memory of the wireless telephone,
- 11 - a step for storing the message in the storage means of the wireless telephone if
12 the user's subscriber profile is compatible with the type profile contained in the message.

1 18. Method according to claim 17, characterized in that the wireless telephone
2 or telephones comprise display means, the method including a step for displaying
3 messages upon occurrence of events specified in a field of the message.

1 19. Method according to claim 17, characterized in that it includes a step for
2 sending an acknowledgement of receipt of the message.

1 20. Method according to claim 17, characterized in that it includes a step for
2 sending an acknowledgement of receipt of the message, the acknowledgement of receipt
3 being accompanied by the profile of the user that received the message.

1 21. Method according to claim 17, characterized in that it includes a step for
2 sending a notification from the wireless telephone to the server, containing a number of
3 times a given message has been displayed, the profile of the wireless telephone that
4 displayed it, and data identifying the number of the message displayed and sent by an
5 advertising client, as well as data identifying the advertising client.

1 22. Utilization of the transmission system according to any of claims 1
2 through 16 to investigate services offered, characterized in that the server comprises an
3 algorithm for logging and extracting statistics from notifications or acknowledgements of
4 reception received from the wireless telephone or telephones in the transmission system.

ABSTRACT

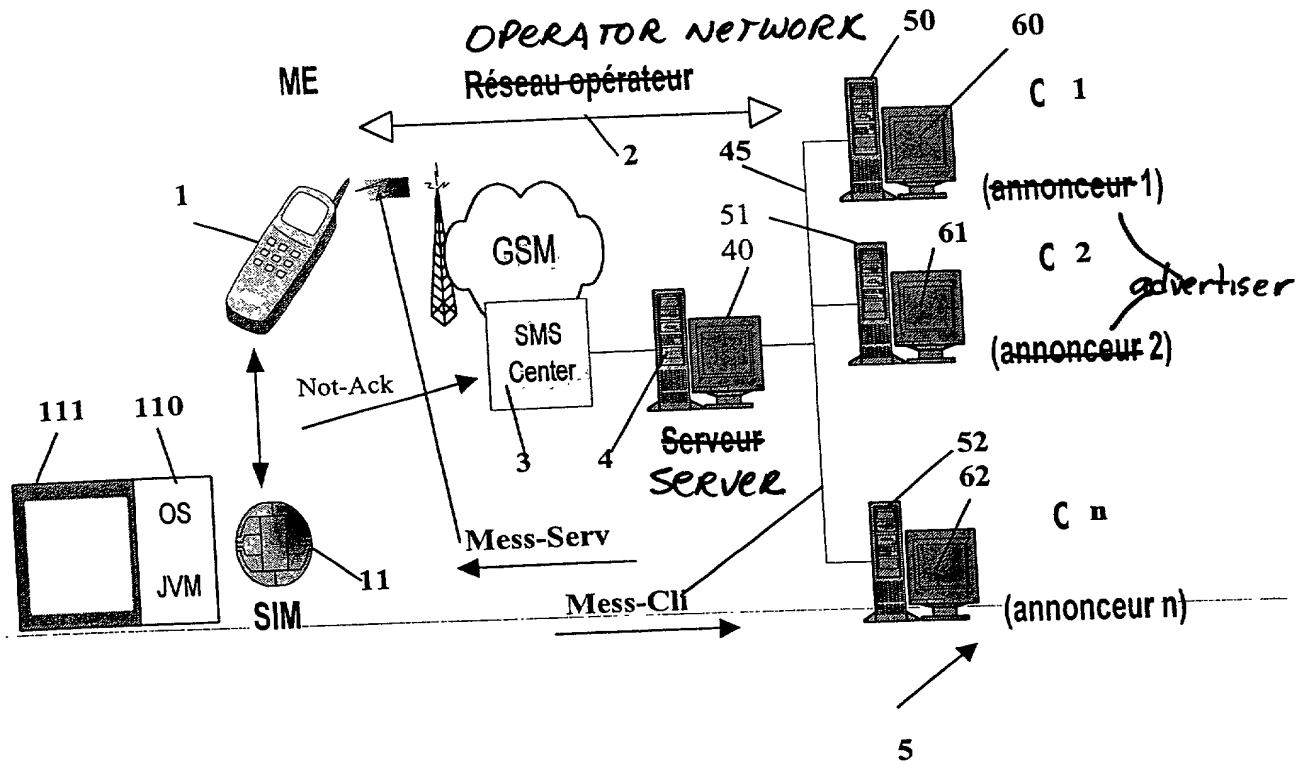
SYSTEM AND METHOD FOR TRANSMITTING MESSAGES AND USE OF SAID SYSTEM FOR TRANSMITTING MESSAGES FOR INVESTIGATING SERVICES THAT ARE PROVIDED

5

The present invention relates to a message transmission system comprising a telecommunication network (2) comprising a communication server (4) and at least one wireless telephone (1), the server comprising means for sending messages to one or more wireless telephones, the wireless telephone or telephones (1) being equipped with means for storing and processing message (Mess-Serv), characterized in that the messages (Mess-Serv) comprise a first field (V-TYP) containing information relating to the type profile of the recipient of the message and in that the processing means compare the profile stored in each wireless telephone relative to the subscriber using the wireless telephone to the profile contained in the message, and authorize the storage of the messages in the storage means if the profile of the subscriber using the wireless telephone is compatible with the type profile contained in the field of the message.

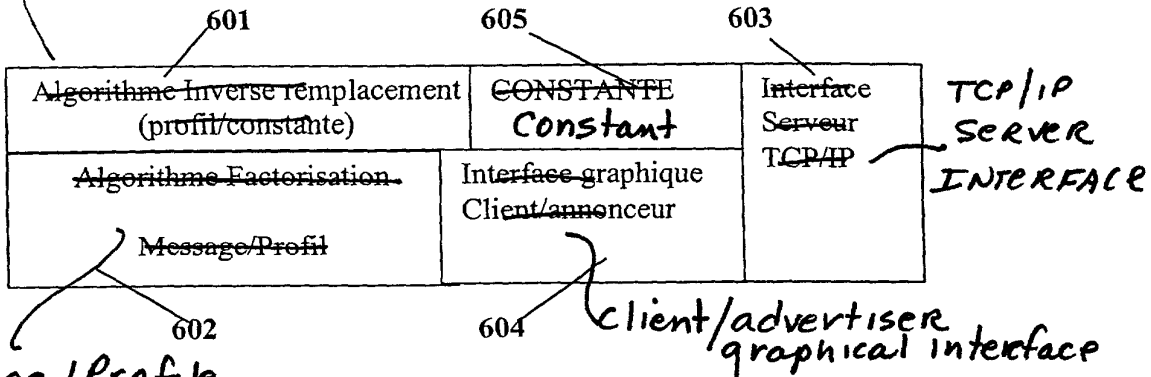
Fig. 1

Fig. 1



INVERSE Replacement
ALGORITHM (profil/constant) ~~PL 2/4~~

Fig. 2a



Message/Profile
FACTORING ALGORITHM

Fig. 2b

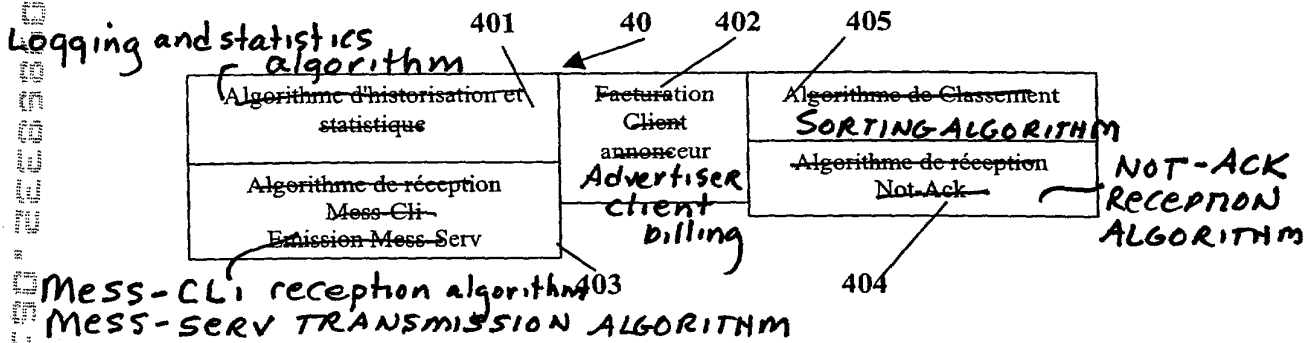
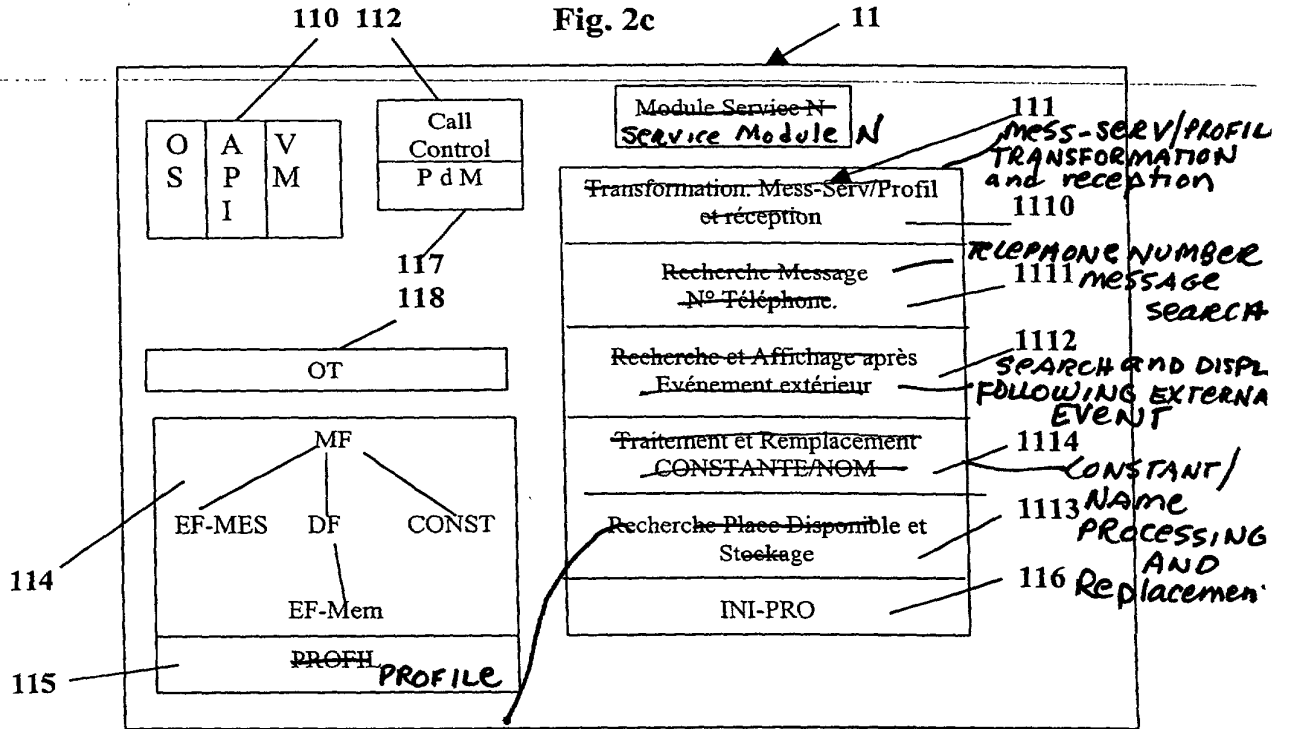


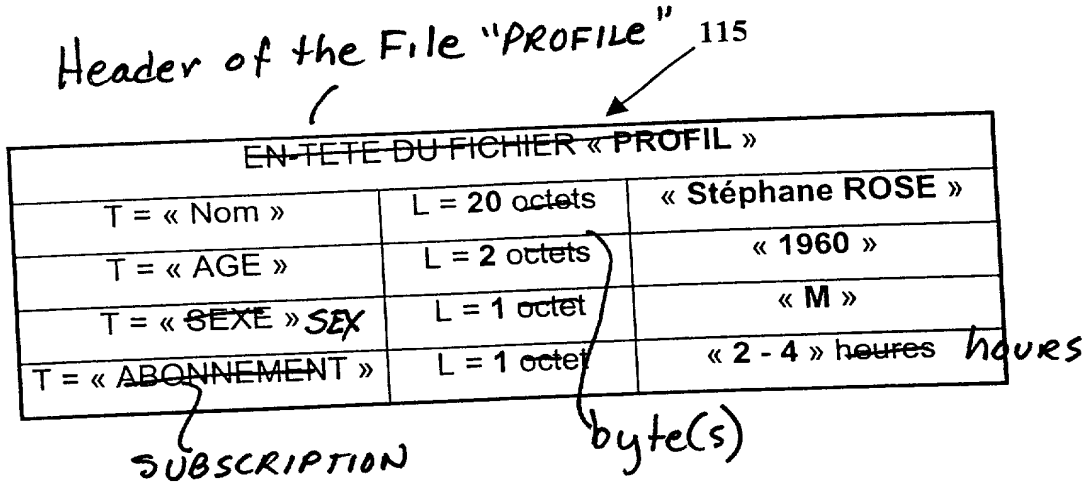
Fig. 2c



SEARCH FOR AVAILABLE SPACE + STORAGE

PI 3/4

Fig. 3a



Mess-Cli

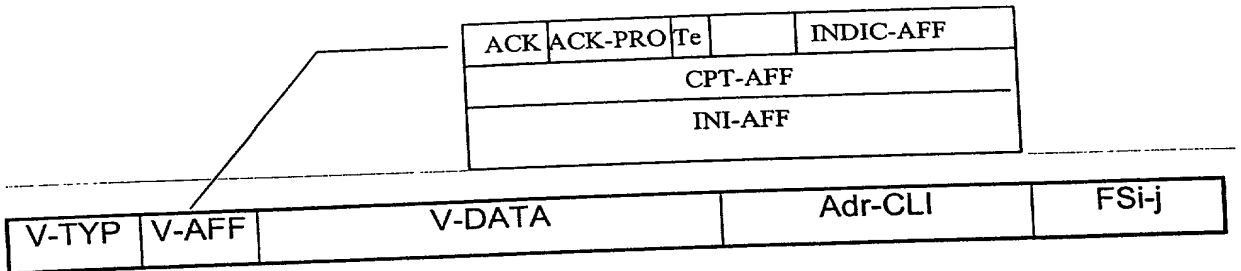


Fig. 3b

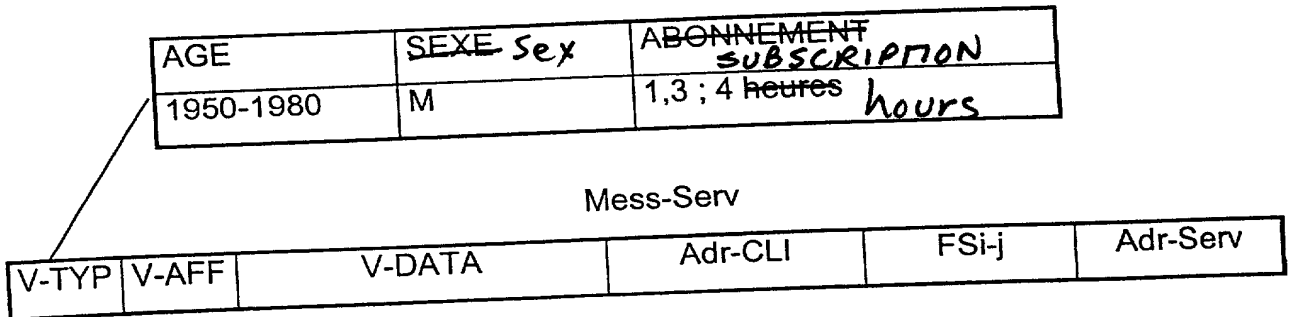


Fig. 3c

~~PI 4/4~~

Fig. 4

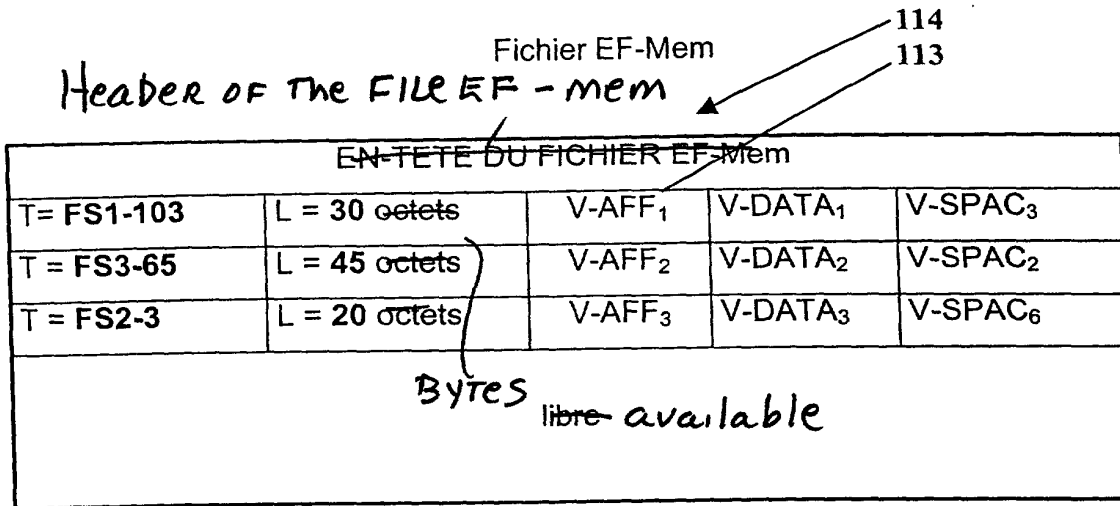


Fig. 5

Not-Ack

| | | | |
|----------------|-------------------|-------|-------------------------------------|
| Tn ou Ta OR | n octets bytes | FSi-j | (données de profil) profile data |
|----------------|-------------------|-------|-------------------------------------|

Declaration and Power of Attorney For Patent Application Déclaration Pour Demandes de Brevets Avec Pouvoirs French Language Declaration

En tant qu' inventeur nommé ci-après, Je déclare par le présent acte que:

Mon nom, mon domicile, mon adresse postale, ma nationalité sont ceux qui figurent ci-après,

Je déclare que je crois être l'inventeur original, premier et unique (si un seul nom figure sur le présent acte) ou un des co-inventeurs, originaux et premiers (si plusieurs noms figurent sur le présent acte) du sujet revendiqué et pour lequel un brevet est demandé sur la base de l'invention intitulée:

Systeme et procede de transmission de messages, et utilisation du systeme de transmission pour l'investigation de services fournis.

dont la description
 (cocher la case correspondante)

- est annexée au présent acte.
- a été déposée _____

Numéro de série de la demande _____

et modifiée le _____ (si approprié)

Je déclare par le présent acte avoir examiné et compris le contenu de la description identifiée ci-dessus, revendications y compris, et le cas échéant telle que modifiée par l'amendement cité plus haut.

Je reconnais le devoir de divulguer l'information qui est en rapport avec l'examen de cette demande selon Titre 37 du Code des Règlements Fédéraux §1.56(a).

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

the specification of which
 (check one)

- is attached hereto.
- was filed on _____ as

Application Serial No. _____

and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

French Language Declaration

Je revendique par le présent acte le bénéfice de priorité étrangère selon Titre 35, du Code des Etats-Unis, §119 de toute demande de brevet ou d'attestation d'inventeur énumérée ci-après, et j'ai identifié également ci-après toute demande étrangère de brevet ou d'attestation d'inventeur ayant une date de dépôt antérieure à celle de la demande pour laquelle la priorité est revendiquée.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior foreign applications

Priority claimed

Demande(s) de brevet antérieure(s) dans un autre pays:

Droit de priorité revendiqué

FR 99 12970 France 18 10 1999
 (Number) (Country) (Day/Month/Year Filed)
 (Numéro) (Pays) (Jour/Mois/Année de dépôt)

Yes
Oui No
Non

 (Number) (Country) (Day/Month/Year Filed)
 (Numéro) (Pays) (Jour/Mois/Année de dépôt)

Yes
Qui No
Non

 (Number) (Country) (Day/Month/Year Filed)
 (Numéro) (Pays) (Jour/Mois/Année de dépôt)

Yes
Oui No
Non

Je revendique par le présent acte, le bénéfice selon Titre 35 du Code des Etats-Unis, §120 de toute(s) demande(s) américaines énumérée(s) ci-après et, dans la mesure où le sujet de chacune des revendications de cette demande n'est pas divulgué dans la demande américaine antérieure, de la façon définie par le premier paragraphe de Titre 35 du Code des Etats-Unis, §112, je reconnais le devoir de divulguer l'information pertinente selon Titre 37 du Code des Règlements Fédéraux, §1.56(a), toute information qui se présente entre la date de dépôt de la demande antérieure et la date de dépôt de la demande, soit nationale, soit internationale PCT.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

PCT/FR00/02895 October 18, 2000
 (Application Serial No.) (Filing Date)
 (No. de Demande) (Date de Dépôt)

Pending
 (Etat) (Status)
 (brevetée, pendante, abandonnée) (patented, pending, abandoned)

 (Application Serial No.) (Filing Date)
 (No. de Demande) (Date de Dépôt)

 (Etat) (Status)
 (brevetée, pendante, abandonnée) (patented, pending, abandoned)

Je déclare par le présent acte que toutes mes déclarations, à ma connaissance, sont vraies et que toutes les déclarations faites à partir de renseignements ou de suppositions, sont tenues pour être vraies; de plus, toutes ces déclarations ont été faites en sachant que de fausses déclarations volontaires u autres actes de même nature sont sanctionnées par une amende ou un emprisonnement, ou les deux, selon la Section 1001, du Titre 18 de Code des Etats-Unis et que de telles déclarations délibérément fausses peuvent compromettre la validité de la demande ou du brevet délivré.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

French Language Declaration

POUVOIR: En tant qu'inventeur, je désigne l'(les) avocat(s) et/ou l'(les) agent(s) suivant(s) pour poursuivre la procédure de cette demande et traiter toute affaire la concernant supris du Bureau des Brevets et de Marques:

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POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

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(Fournir les mêmes renseignements et la signature de tout co-inventeur supplémentaire.)

(Supply similar information and signature for third and subsequent joint inventors.)